

AMENDMENTS TO THE SPECIFICATION

On page 36, lines 22-29, please replace the paragraph beginning on line 22 and ending on line 29 with the following amended paragraph:

The sequence for Kv3.4a is in Gene Bank under accession number X62841 (SEQ ID NO:6; gtgcgttct ctgtcttct ggggttggg ggggcgtgc cccggcccgg agcatccttg tcttgcctc aaccttctga gacccggac ccttggatt ggtcctcga cctgtgtt cacctctgc ctcccctagg ttcttctgc caaatcccaa ccacctgtgc accacaaaa gccaaactct cctgtctcga gcccggggg ggtgggggtg gggggaggca ggggcagagc cactctgcag aagggggcgc caccacctcc tgcctctcc tctccacca cctctctc ctctcgtct cctccccctc cccgttctga cgtgcctcc ttgggaaggg tggttggagg gcagcggccg cccaagccg gagccccga gcgcttcta tgatcagctc ggtgtgtgc tcttctacc gcgggcgcaa gtccgggaac aagcctcgt ccaaaccatg tctgaaggag gagatggcca agggcgaggc gtcggagaag atcatcatca acgtgggagg cacgcgacat gagacctacc gcagcacct gcgcacccta ccgggcacc gccttgcctg gctggcggat cccgacggc ggggtcggc agatcggat ggccggcgtg caggcagcag cggcagcag ggcggcggc ggggctgtga gttcttctt gatcggcacc cgggtgttt tgcctatgtg ctcaactact accgcacgg caagctgcat tgcctgcag acgtctgtg gcctctctt gaggaagag tcaattctg gggtatcat gagacagatg tggaaacctg ctgctggatg acctaccgc agcaccgca tctgaaggag gcactggaca tctcagag cccggacgg ggcgggggtg gcgcagggc cggcgacgag gctggagag atgagcggga gttggcctg cagcgcctg gccccatga aggaggctt ggccctggg ctgggtccg ggggtgccgt ggctggcag cccgaatgtg ggcgctctc gaggacctg actcatccc ggcggccagg gtgtagctt ttgcctctt ctcttctc ttggtctca ttaccacct ctgcctggag acccagagg ccttcaacat tgaccgaaat gtgacggaga tccaccggg aggaatatc accagcgtg gcctccggc ggaggtaga acagaacca ttctaccta catcagggc gtgtcgtga tctgttctc tctagatc ctggttcca ttgtgtct cctgatac ttggacttg tcaagaacct gctcaacatc atcgaattg tggcaatct gccctttac ctggagggtg gattgagtg cctgtcatc aaggcagctc gagatgtgt ggggttctg ctgtgtgtc gcttgtac catcctcgg atctcaagc tcacacgca cttgtggg ctgctgtgc tcggccacac actccgggc agcaccaac agttcctgt gcttctatc ttctggccc tgggtgtgt catcttgc accatgatct attatgtga gcgaatcgg gccaggccat ctgaccacg gggcaatgac cacaccgact tcaagaacat ccccatcgt ttctgttgg ctgtgttct catgacaac ctggctatg gggacatga tcttaagaca tggtcaggaa tctgttgg tgcgtgtgt gcactggct gtgtgcta catlgccat cctgtgctg tcatgctcaa taactttgt atgtactact ccttggctat ggccaagcag aagcttcca agaaacgaaa gaagcatga ccacggccac cccagctga gtcacccatt tactgcaagt ctgaggagac ttaccccgg gacagcacct acagtacac cagccccct gcccgggaag agggatgtgt cgagaggaaa cgagcagact ccaagcagaa tggtagcgt aatgcggctg tctccgatga ggaggagct ggcctcacc agccccggc ctggccccc accctgaag agcgtcagc cctgagacgc tcaggcacac

gggacagaaa caagaaggca gctgcctgct tcctgctcag tgctggggac tatgcctgtg ctgatggcag tgtccagaaa
 gaaggcagtg ttgagccgaa agcgtgcgtc ccagtgtctc acacctgtgc tctttaaaca cagagacctg ccaagacgcc
 ctctcgtcca actatgcccc tgctgaagtc ctcacctctc cttagagcgg caccaacgtg agaaagacag acagacagaa
 agccagaggc ttaggaaaac tctggaaccc aggcacgaat ctttgcgtgg gaaagatac cttgtttgca caagactggt
 ggaaaaatct cccatgcaac tctcagggcc cagagccatc tgggtctgat actctgttct actgtacatt gaagagacat atatgcacat
 atagtatcta tattcatata tactatatac tcttgtgtgt agtcacgtg ctactgggtg tctgtcttca tcgttaggct atgtctccca
 agtctctgc ccacctgtt tccccacccc ctctccttc atggattgtt tctctgacc atgttttgg agtgtcccag gagaggtata
 cctgggacct gccctccag ctgggtggc ccaggctgct ctacttggg ggtgtcccct gccagcaggt ggcctgctga
 agtcagttga aggcacgatt gcccttctgg ggtcactgct tcactagc). The sequence for Kv3.4c is identical to the

Kv3.4a sequence except that 62 bp (position 2222-2283) of Kv3.4a are absent in Kv3.4c. As a result of this alternative splicing, the first 608 amino acids of both variants are identical, but the last 17 (for variant a) and 19 (for variant c) amino acids are completely different. Both variants are described by Rudy and colleagues in Veaga-Saenz de Miera E. et al. (1993) Shaw-related K channels in mammals. in Handbook of Membrane Channels: Molecular and Cellular Physiology. (Peracchia C, ed. Academic Press, Orlando) pp 41-78.